



CODE CONNECTION

July/August 2003

Jack Wants You to Know



Jack wants you to know that the Board of Housing and Community Development has adopted the 2000 Edition of the proposed International Building Codes. The final regulations are scheduled to appear in the Virginia

Register in late July 2003, with an effective date of September 1, 2003 (if the process stays on track).

Please accept my personal thanks to all of you, both government officials and members of the private sector, for all the time you spent assisting members of my staff, the Board of Housing & Community Development, and the Department of Housing and Community Development in the development of the international codes. Once again, Virginia has proven that we will prevail when working as a team to accomplish a mission.

I will be mailing, very soon, a schedule of code change training which all certified code enforcement personnel must attend. Please mark your calendars when the schedule arrives to ensure your attendance. We do not want anyone to miss out.

Should you have any questions, please call. □

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Not Your Parents' Building Inspector: Thoughts On The Roles and Responsibilities of the Modern Building Safety Professional

By Lynn Underwood, CBO, Building Official for Arlington County, Virginia

Yesterday's Inspector

In our parents' day, a building inspector might have been a former one-trade expert with limited knowledge of other aspects of construction. An inspector was almost always a man. Typically, he might have been injured during a construction accident or simply was older and could not compete with youthful construction workers. Thus, he was drawn to a less physically demanding job.

Today, both men and women participate at every level in this profession and exhibit equal skill and talent.

Today's Building Safety Professional

Today's building safety professional is different. Now, both men and women participate at every level in this profession and exhibit equal skill and talent. Comprehensive educational opportunities afford the modern building safety professional up-to-date training. Required certification examinations maintain professional standards of competency. There are specialists who are experts at a particular aspect of construction as well as generalists who know a lot about all of the construction trades. Today, there are more registered professionals. For example, today's plans examiner is more likely to be a registered architect or engineer

than in the past. There are numerous building officials now who are also lawyers. Now, many building safety professionals have undergraduate and graduate degrees. With building code studies being introduced in colleges and universities, some architectural and engineering students are entering the profession directly. For many, it is becoming a highly attractive professional career.

Expanded Roles and Responsibilities

Today's building safety professional must be well-versed in modern technology. For instance, records management pertaining to building permits and inspections may include operation of sophisticated tracking software, involving establishment of a computer database that is updated with personal digital assistants (PDAs)/hand-held computers. Digitization has permeated all aspects of our lives and now building permits are available through the Internet thanks to the pioneering work of building safety professionals who have embraced the new computer technology. Moreover, most modern building safety professionals are required to

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Good Things to Know

2003 Governor's Housing Conference

Mark your calendar for November 12-14, 2003 and plan to join us in Norfolk for the most important event of the year for Virginia's affordable housing advocates and providers. E-mail your questions to: Governor's Housing Conference at ghc@dhcd.state.va.us.

Department of Housing and Community Development - A 2003 Legislation Sampler

HB 1940: The Elevator Safety Act, which proposed establishing free standing elevator safety regulations (Failed - but the issue was referred to the Virginia Housing Study Commission).

HB 2480: Authorizes the agency's board to investigate claims of performance failures by building materials, methods, or designs and, when justified, to hold public hearings on the issue, and to modify regulations where necessary to address the problem (Passed).

HB 2528, SB 867, SB 1087: Called for new homes under various circumstances to include design provisions addressing the concept of "visitability" [certain minimum accessibility features would be covered] (Failed but the issue was assigned to the Virginia Housing Study Commission for further consideration).

HB 2529: Requires the board to promulgate new regulations for the installation of emergency communications equipment in new buildings to assist emergency personnel (Passed and a parallel study resolution calls on the Department of Fire Programs and DHCD to study the issue during 2003).

HB 2683: Grants specific authority to local officials to grant building code modifications to facilitate rehabilitation of existing buildings (Passed).

Code Academy Presents at PMPV

By invitation, Jim Moore and Kenny Smith, inspectors with Fairfax County, supported with facilitation by Dan Gilham, Virginia Building Code

Academy, presented the Code Academy's new plumbing inspection module at the Plumbing and Mechanical Professionals of Virginia's (PMPV) annual Educational Conference at the Fair Lakes Hyatt Hotel in Fairfax County on April 10th and 11th, 2003. Participants gave the presentation rave reviews.

VPMIA Summer School of Instruction

This summer school of instruction convened on July 18, at Graves Mountain Lodge in Syria, Virginia. The all day class encompassed an overview of the 2000 International Mechanical Code taught by Greg Gress from the International Code Council.

VBCOA provides Member Scholarships to ICC Conference in Nashville, Tennessee

At the May 2003 board of directors meeting, \$4000.00 was approved to provide partial or full scholarships to attend the September 5 - September 14, ICC Conference in Nashville, Tennessee. For information and an application to apply for this scholarship go to the VBCOA website: www.vbcoa.org.

James Lee Witt Named New CEO of the International Code Council

The ICC Board of Directors has named James Lee Witt as the new Chief Executive Officer (CEO) of the International Code Council (ICC). Witt has more than 25 years of leadership and experience in the field of disaster management, including eight years as the Director of the United States Federal Emergency Management Agency (FEMA). Witt's position as the CEO of the International Code Council is the culmination of years of experience with building codes. When he was 21, Witt founded his first company, a commercial and residential construction company. He would go on to be elected to six terms as a county judge and tapped by then-Governor Bill Clinton to serve as the Director of Emergency Management for the state of Arkansas before going on to Washington, DC to be the Director of FEMA. □

Certification Examinations: Test Your Best Tips

By Bob Gregory, CBO, President of Contractors Institute, Inc.

Examination Dread

Every day inspectors perform their duties with competency and professionalism, answering the toughest questions quickly and efficiently. Why then is it such a dreaded task to take an exam?

One reason is that for most inspectors it has been a number of years since they have been in a classroom environment and tested on their knowledge. Examinations present unique challenges for adults. Some test takers have misconceptions about the process or treat the exam as a personal challenge rather than a professional process.

Easing The Exam

All test candidates can perform better by following certain test strategies. The examination process is something that you can work your way through if you treat it as a job related task. Prepare for the job and complete the task. Remember the story of the young musician walking the streets of New York City carrying his violin? He discovers an old musician carrying a violin and asks him how to get to Carnegie Hall. The old musician answers, "Practice" "Practice" "Practice". How does one get to pass the exam? The answer is "Study" "Study" "Study".

The examination is open book so it is often asked, "How hard can it be"? That is the same question I asked my spouse of 34 years when we were watching figure skating on television. "We can do that Nancy, how hard can it be?" Whatever your circumstances, hard skating or on thin ice, the examination can be made easier.

Here's how:

1. The first task is to find out what references are

needed.

Using a high speed Internet line (this is a 40+ page download) go to

- this website address www.iccsafe.org/certification to find the certification link, and print the bulletin. This will list the references you need and the content areas of the exam. Can you use a different reference? Not if you want to pass the exam. The test developers drew questions from the particular book listed so your study book has to be the same titled reference, and the same edition.
2. Success on the exam starts well before you enter the exam room. The only way to pass

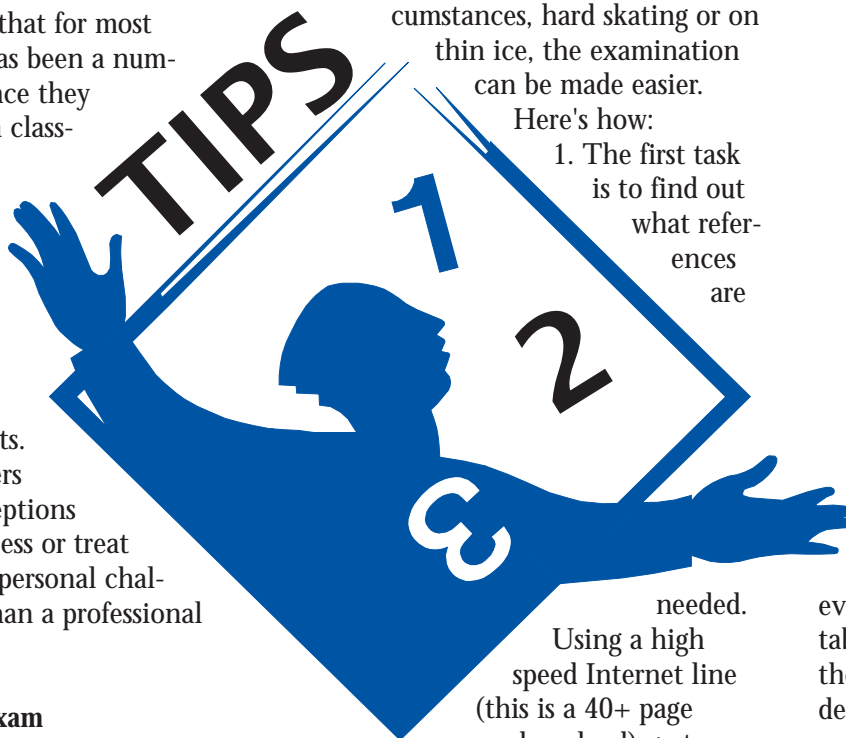
the exam is to be familiar with the reference materials so that you know where in the book to look for the answer. Searching takes time and the "budget" is usually 2 minutes per question.

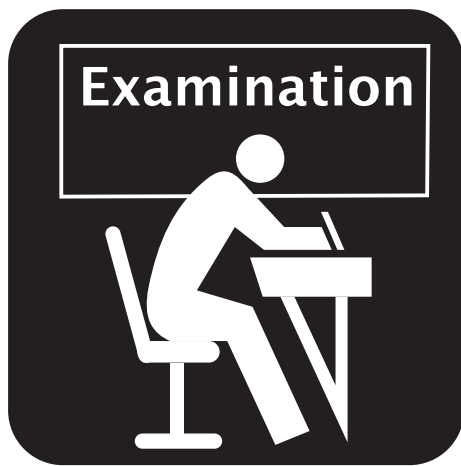
3. Now that you have the reference, make it your own. Get to know it. Get to know it very well. The noise that a reference book makes when being opened in the exam room for the very first time ever is unique. The crunching of the binding makes a sound very much as if a person were saying, "retake". Your book needs to be opened many times before exam day so it sounds like "pass".

Plan Your Study

Set your goal to read a chapter a week. That means reading everything in the chapter including tables, exceptions, notes, especially the exceptions and notes. Test developers like to visit the areas that make a difference between someone who knows the code and someone who "thinks" they know the code. Now, review the published test outline to determine your study regimen and identify study resources. Find a course at the community college, VoTech, Code Academy, in-house seminars, associates, or use a practice exam. Form a study group with another person who has to take the same exam. Take time each week to study. Get the kids to ask you questions from the book. They may learn something about plumbing or electricity. Remember the exam is a

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Your Best Exam Tips

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test of your ability to answer a fixed number of questions in a specific period of time. It is counterproductive and wastes time and energy to argue with the test proctor or to get mad at the test question.

ICC Examination Caution: A note of caution is that highlighting, writing on, or marking of reference materials for an ICC exam is prohibited. What you can and cannot do in an ICC Exam is delineated as follows:

- * **Can Do:** Take listed reference materials only.
- * **Cannot Do:** Have any handwritten notes, loose-leaf papers, or any notes or markings in reference materials.

Preparation and Process

Prepare for the trip to the testing center. Know where you are going, how long it will take to get there and where to park. Assemble your reference materials and supplies and place them where they cannot be forgotten on test day, especially your wallet with your photo ID. Take a spare calculator, pencil and a ruler. The spare calculator will be a lifesaver when "old reliable" decides to go to heaven during the exam. In the test room, when you receive the exam, verify that it is the correct test. This is especially critical for a paper and pencil test when a simple distribution error can be made. Listen to directions and ask the proctor to clarify any issues.

When taking the test, go through the examination the first time without opening your reference book, picking up the answers that you know are right. Then open your reference and go through the exam at least twice more, answering the easy questions first and skipping the harder ones. All the questions have the same value. The hard ones count the same as the easy ones.

A computer delivered test allows you to mark a question and return to it later. If you are taking a paper and pencil test, when you skip a question, place a mark on the answer sheet next to the question you have skipped which will save its place in line for you to come back to later. Computer administered exams have a mark key so you can instantly go back to those you have skipped. Even if you answer a question you can mark it and return later for another look.

Save all the math questions for at least the second pass. This organizes your thoughts towards "doing math" rather than shifting focus from text to math to text. If your math answer doesn't match any of the four offered, try plugging one of the answers into

your formula and see if you can reverse engineer the problem.

Read each question carefully. Determine what is being asked and then read all the answers before selecting one. Once you have selected and marked the answer, move on. Don't doubt your selection. Only change an answer later if you are positive that your first selection was wrong. Many candidates erase themselves out of a passing score.

If two answers mean the same thing, they are both wrong. Only one answer is correct. Watch exceptions, asterisks and notes. When you have finished the examination, make sure that you have answered every question. There is no penalty for guessing and getting a correct answer, but the question is automatically wrong if no answer is selected.

Time's-Up

You successfully perform your job day after day handling questions satisfactorily. Test-day is just handling a lot of questions in a given period of time. You can do this! On test-day when you get the "time's-up", it's over. Relax. Take a deep breath. Celebrate. You got through it! Hopefully, following "Test Your Best Tips" helped you pass.

Bob Gregory is President of Contractors Institute, Inc., a Virginia based publishing and training company. Bob has experience as a schoolteacher, building contractor, supervisor of the Virginia Building Code, and Vice President of National Assessment Institute. He is an adjunct instructor in the Virginia Community College System and teaches classes on contracting. Bob's website address is www.virginiaexamtraining.com. He can be reached by email at info@virginiaexamtraining.com □

Wanted - Volunteer Mentors

By Sharon Finan, Certification Program Manager, DHCD

Do you easily pass national certification examinations? Do you have difficulties with national certification examinations but have figured out a way to pass? In either case, would you be willing to share your secrets and methods for success? More importantly, for those fellow Virginians having difficulty with their exams, would you be willing to volunteer as a **Virginia Mentor**?

The Department of Housing and Community Development's Training and Certification Office is in the process of developing a Virginia Directory of Certification Examination Mentors. The role of the Mentor would be to assist fellow Virginians to pass their certification exams. Mentoring would be by area of expertise and by email and telephone. If you are interested in becoming a volunteer Virginia Mentor, please provide the following information:

1. Name and Position:
2. Professional Certifications:
3. Email:
4. Address:
5. Phone:
6. Fax:
7. Prior Mentoring Experience:
8. Areas of Expertise for Mentoring:

If you wish to volunteer, please forward this information to Sharon Finan, Certification Program Manager and Coordinator for this project, at: Department of Housing and Community Development, Training and Certification Office, 501 N. Second Street, Richmond, Virginia 23219.

For questions or additional information related to this project, please contact Sharon at: sfinan@dhcd.state.va.us or by phone at (804) 371-7185. We look forward to including your name as a **Mentor** in our Virginia Directory.

go beyond the limits of enforcing codes. Today, modern building safety professionals also provide:

- Regulation of all new construction and the repair and alteration of existing buildings.
- Plan review and on-site construction inspections for structural, plumbing, mechanical, and electrical systems as well as elevator safety, energy code compliance, and accessibility compliance.
- Code development inputs to help write codes to meet emerging and future needs and evaluate proposed code changes.
- Information and technical support to their local jurisdiction.
- Technical support and assistance to applicants and design professionals regarding complex aspects of the code and how safety can be achieved.
- Technical advice and assistance to the design professional regarding aspects of earthquake awareness/preparedness and flood plain management.
- Education for the construction community, design professionals, and others about local construction codes and how to understand the complexities of the codes.
- Coordination with fire department, health officials, and zoning and public works to provide a seamless set of rules for the development community.
- Interfacing between industry and public safety to embrace new technologies while maintaining safe structures.
- Management and coordination of the permit process with other departments and government agencies to ensure that the end product meets the needs of the community.
- Leading edge thinking and



acceptance regarding use of new construction technologies.

- Representation on standards boards and committees.
- Participation in industry organizations such as the National Association of Homebuilders and the American Institute of Architects and many others to further the interests of their profession.
- Education of their elected leadership in state legislatures and lobbying for or against proposed laws that affect building safety.

Continuing Evolution

For the modern building safety professional, keeping up-to-date is essential. Codes change constantly driven by the almost daily invention of new materials and methods of

construction. Modern building safety professionals must engage in continuing education and evolution. They must embrace new concepts and meet new needs. For example, when a need was expressed for a performance standard, this profession delivered a codebook: Performance Standard for New Buildings and Structures. When water conservation was an issue, water-saving devices found their way into the code. Before the Americans with Disabilities Act (ADA) was passed by the Federal government, handicapped accessibility was in the code and being enforced! The energy crises of the 70's resulted in industry standards set out by energy codes, and sustainable design and green buildings are now an integral part of the ver-

nacular for this profession. When the national design and construction community expressed a need for one set of rules, this profession delivered the International Family of Codes. When a societal need arises, the building safety professionals respond and speak with one voice. As construction becomes more complex, building safety professionals will rise to meet that challenge. Their motivation is to serve as society's watchdog while embracing the needs and interests of the construction industry. If you are wondering how you have been affected, consider this: *Chances are that you are in a building right now. Ask yourself this: How do I know that I am safe in this building?* The answer is that the modern building safety professional has verified that it meets society's standards for your safety. We do our job, so that our citizens can live and do theirs in safety! □

Virginia State Building Code Technical Review Board Interpretations

Interpretation Number: 19/96
Code: Uniform Statewide Building Code
Section No (s) : Section 109.6.2

Question: Is there a percentage of damage to an existing building which would trigger the provisions of the USBC for new construction to apply to the rebuilding of the damaged building?

Answer : No.

Interpretation Number: 18/96
Code: Uniform Statewide Building Code
Section No (s): Section 202.0

Question : Are the definitions in Chapter 2 of the BOCA Code and the definitions set out in Part IV of the USBC applicable to Parts I, II, III and IV of the USBC?

Answer: Yes

These Official Interpretations were issued by the State Building Code Technical Review Board at their meeting on March 21, 2003.

1988 – Could It Happen Again?

Cross-Connection Control

Case Study

In 1988, I received a call from a resident saying that for the past week, her water periodically had a strange taste to it. She wanted someone to test it. She said she had been mixing powdered baby formula with the town's tap water for her three-month-old baby. Recently the baby had experienced severe diarrhea and vomiting. Knowing that babies often get sick anyway, she was not too concerned until she and her husband began experiencing the same symptoms.

We took a sample of the water at the house fixture and found it full of iron bacteria. After investigation, we found that the house was heated by an aging radiator/boiler system. The single check valve on the boiler had failed. The street in front of the house was undergoing extensive rehabilitation, including the replacement of 2500 feet of water main. The contractor had to periodically turn off the water main to make branch connections of other water mains on side streets. With reduced supply pressure to the house, the heated boiler water overcame the domestic water pressure in the building and with the failed check valve, contaminated the domestic water in the home. Even though the contractor flushed the main after restoring service, the contaminated water in the building was not flushed.

To correct the problem, we required the homeowner to install an inline dual check backflow preventer with an intermediate atmospheric vent on the boiler. At the same time, we retrofitted the water meter box with a dual check backflow preventer. Even

though Warrenton was retrofitting all residences with main line protection, this particular residence had not been retrofitted at the time.

Since this incident, the town of Warrenton has had an aggressive ongoing cross-connection control program. Though technically our responsibility ends at the meter, we take the initiative to work with the building official and enforce protection in the building at the fixtures where needed. If you cannot get this cooperation with the local building department, at least start your main line protection program and stick with it. Water purveyors have a moral obligation to protect their water from the hazards of backflow. Besides, cross connection control by water purveyors has been state law since 1982. Most water purveyor's liability insurance policies do not cover accidental contamination through cross-connections. Let's say you have one instance where a small apartment complex of say 12 residents are poisoned and confined to convalescence care for the rest of their lives due to water contamination through a backflow situation. If a good lawyer discovers that you do not have an active cross-connection control program, he will be able to retire to the Bahamas!

Note: This article was written in 1988 by Larry K. Oliver Sr., Cross-Connection Control Official for the Town of Warrenton, VA. It has been reproduced here for public information purposes with his permission. □

Second Time's a Charm for New Building Inspection Training Module

By Dan Gilham, Manager Virginia Building Code Academy

The second offering of the Code Academy's new, task-based building inspection training module was conducted in Fredericksburg, Virginia on May 19 - 21, 2003. The highly expert team that delivered this second offering included seven instructors: **Art Berkley**, Building Official for Isle of Wight County, **Jim Collins**, Chief Building Inspector for Prince William County, **Paul Lynch**, Director of Residential Inspections for Fairfax County, **Chuck O'Donnell**, Supervising Residential Inspector for Fairfax County, **Roger Robertson**, Supervisor of Inspections for Chesterfield County, **Steve Slaght**, Supervising Residential Inspector for Fairfax County, and **Mike Thuot**, Supervising Residential Inspector for Fairfax County.

Thirty-six students participated in the program. Students came from widely distributed geographical areas and diverse localities. Their reactions and comments on the Academy's end-of-course evaluation form were highly appreciative and very positive as follows:

*** Relevancy to the job:** 1.) I liked the format. It was much better looking at the code from an inspection point of view; 2.) I learned more than I thought I would - This was an excellent experience. I realize I have been overlooking items in inspections; 3.) This has been a great help in gray areas. Good to be shown the difference between

CABO and IRC; 4.) 100%; 5.) Great learning tool; 6.) The content was very timely and will be a huge help; 7.) Everything covered was relevant to the job of inspector.

*** Benefits to job performance:** 1.) As a fairly new inspector, it is impossible to overstate the benefits of this course. I expect to start using the information tomorrow and every day; 2.) You have helped me see and understand the changes in the IRC so I can explain to builders the differences coming up; 3.) After each training module, I have gained more confidence in performing my job; 4.) Much needed to be in line with current codes and updates; 5.) Many benefits with the checklists and input from so many instructors; 6.) Will help me in all phases of work; 7.) I know I am a better inspector since taking this class. I see things clearer on a lot of gray areas for me.

*** Transfer-of-training to the job:** 1.) Will be able to apply new knowledge immediately to my job; 2.) Everything applies; 3.) I think the information I received here can be directly transferred to my job; 4.) This class should enhance my ability to perform my job with more confidence; 5.) This is the first step to being a building inspector and it gets me off to a great start; 6.) Training was very valuable to be used on the job; 7.) This class is definitely information that I will use from day to day in my job.

*** Instructors/Instruction:** 1.) The team did a great job with what could be very dry material; 2.) Very

energized, very interesting, very knowledgeable; 3.) All instructors were very knowledgeable and explained code very well; 4.) Multiple instructors excellent idea; 5.) All instructors very good and knowledgeable; 6.) Very knowledgeable instructors with many real life examples; 7.) Very helpful and informative; 8.) Instructors were clear and concise with the material; 9.) I really enjoyed their method of teaching and instruction; 10.) I was pleased with all, they were a good team; 11.) All were excellent, liked team approach.

*** General comments:** 1.) The creators and teachers should be commended; 2.) PowerPoint presentation and pictures were excellent. Very well organized; 3.) Keep up the good programs; 4.) Well presented; 5.) Very good class; 6.) Great class; 7.) This training class was great; I am an electrical inspector but I learned a lot about building. Teachers, great job. I really enjoyed this class. Hope all modules are this good.

The Code Academy wishes to acknowledge the outstanding work of a great team of instructors including Art Berkley, Jim Collins, Paul Lynch, Chuck O'Donnell, Roger Robertson, Steve Slaght, and Mike Thuot. As students expressed it on the Academy's end-of-program evaluation form: "The team did a great job with what could be very dry material ... the creators and teachers should be commended." □

Instant "Test Tips" for Certification Examinations

By Dan Gilham, Manager, VBCA

A certification examination is in your future. You are looking for help. Where can you go? Ultimate answers aside, we have located a website that can provide help. The website belongs to Code Cards and can be accessed at www.buycodecards.com. On this site, click on "Test Taking Tips". This will take

you to the site's entry on how to prepare and pass a certification examination. Subjects covered include: 1) Studying; 2) Attitude; 3) Taking care of yourself; and, 4) Being Test Smart. There is particularly useful material on

what to do when you are stumped on a test item. This material is in a section on "How To Answer A Multiple-Choice Question Correctly". Here is an excerpt:

[Multiple-Choice Questions - Excerpt]

"The following is a list of cues for selecting the correct choice or alternative on objective tests when you are not completely sure of your answers. If you make use of these cues when you are in doubt about a test item, you may increase your chance of obtaining a higher test score.

CUES IN THE ALTERNATIVES - Five areas are associated with the correct alternative.

1. Most General Alternative - The correct alternative is often the most general since the most general alternative includes the most information. You will often find a list of items that have some very technical and specific alternatives and one alternative which is more general. Chances are the most general alternative is the correct one. **For example:** The lungs

A. are solid and immobile and located within the chest.
B. are the only organs that produce insulin.
C. function primarily in respiration.
D. possess the sphincter of Oddi.
Even if you aren't sure of the correct answer, you can see that the alternatives A, B, and D, all deal with specific facts and details about the lungs. C deals with a main feature of the lungs, respiration. Since C is more general, it is correct.

2. Length - The correct alternative is often the longest. If you have noticed that most of the correct answers have been the shortest, then when you aren't sure, select the shortest. If, on the other hand, most of the correct answers have been the longest, select the longest answer when you are unsure. No particular trend for either? Try the longest. **For example:** $3 + (7+1) = 3 + 7 + 1$ because:

A. $3 + 7 + 1 = 11$

B. parentheses preceded by an addition sign may be removed with-



out changing the signs of any numbers inside the parentheses (the associative law of division).

- C. division is indicated.
- D. parentheses preceded by a minus sign may be removed.

In this item, B is the longest and therefore is most likely correct. In this case, it is correct.

3. Middle Value - The correct alternative is usually of middle value. If the alternatives range in value - old to new, early to late, big to small - and you are not sure which one is correct, eliminate the extremes and pick from the middle value or values. Example: The mature human being has how many teeth?

- A. 15
- B. 32
- C. 54
- D. 7

Eliminate the two extreme values, C and D. Since 54 and 7 are extremes, they are probably incorrect. This leaves you with two alternatives from which to select your answer.

4. Two Alternatives Mean the Same - The correct alternative is probably not one of a pair of similar statements. If two alternatives mean the same thing and there is only one correct answer, eliminate both of them. Neither will be correct. Make your choice from those remaining. Here's an example:

The treaty of Brest-Litovsk was ratified by Moscow because:

- A. Tsar Alexander I wanted to prevent Napoleon's invasion of Russia.
 - B. Russia was unable to keep up with the armament manufacture of Austria.
 - C. Russia could not keep pace with the military production of Austria.
 - D. Nicolai Lenin wanted to get the Soviet Union out of World War I.
- Since alternatives B and C have sim-

ilar meanings, choose between alternatives A and D. The correct choice is D.

5. Two Alternatives are Opposite

- The correct alternative is probably one of a pair of direct opposites. If you notice that two alternatives have opposite meanings, one of them is probably correct. Example:

The Planarian has:

- A. An anterior brain.
- B. Three legs.
- C. Red eyes.
- D. A posterior brain.

Notice that alternatives A and D are opposite. Therefore, you would eliminate the other two alternatives. One of the opposites is probably correct.

In this item, A is the correct response.

CUES IN THE RELATIONSHIP BETWEEN STEMS AND ALTERNATIVES

The next group of cues is found in both the stem and the alternatives.

In this group are factors within the stem of the item which will help you to choose the correct alternative.

Grammatical Agreement of "a" and "an" - In a test item, the correct alternative should agree grammatically with the stem. For example, a stem ending with the word "an" calls for a response beginning with the letters a, e, i, o, or u. A stem ending with the word "a" calls for an alternative beginning with any other letter. Example: A biologist who specializes in the study of the relationships of an organism to its environment is known as an:

- A. ecologist
- B. structuralist
- C. taxonomist
- D. naturalist

Since the stem ends with the word "an", the correct alternative must begin with a vowel. The only one that fills this requirement is ecologist. A is the correct response.

Singular and Plurals - If the stem

uses the word "is", then the correct alternative will be a singular word. If the stem has the word "are", find an alternative with a plural, or a word which means more than one object. **For example:** Important in feeling pain are:

- A. bone
- B. ear
- C. muscle
- D. nerves

Since the stem calls for a plural answer (notice the word "are" in the stem), the correct alternative must be a plural. The only possibility is nerves. Even if you weren't sure of the answer, you could choose D, the only plural, and you would be correct.

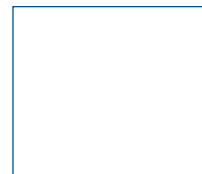
SUMMARY - When you are given a list of alternatives and are not sure which is correct, look for the degree of generalization, the length, middle value, and similarities of opposites in the statements. Select the most general answer instead of a specific. Choose either the longest or shortest alternative depending on the trend seen in the rest of the test. If you have noticed no trend, select the longest alternative. Eliminate the extreme value, and choose the alternative with a middle value. Also, if you find two alternatives with the same meaning, eliminate both of them. If you find two alternatives with opposite meanings, choose one of them."

That's it for a sample of what you can find on this website. The DHCD Training and Certification Office provides this material for information only. TCO does not endorse this material or guarantee that the results you desire will be obtained. For further elaboration and detail on "Test Taking Tips", visit the website at www.buycodecards.com. □

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We're on the Web:
www.dhcd.state.va.us

Code Connection Subscription

"Code Connection" is published by the Department of Housing and Community Development. The purpose of the publication is to keep interested parties aware of events on the state and local levels. The newsletter addresses training schedules, interpretations by the Technical Review Board, and articles of interest to building and fire-prevention professionals.

"Code Connection" may be sent to you for a yearly subscription of \$12. Please make checks payable to: Treasurer of Virginia and mail to: DHCD, Training and Certification Office, 501 North Second Street, Richmond, VA 23219.

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